Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application:

1. (currently amended) Method for creating a saliency map of an image ~~characterized in that~~ wherein it comprises the steps of :

- Projection ~~(E1)~~ of said image according to the luminance ~~(A)~~ component and if said image is a color image, according to the luminance ~~(A)~~ component and according to the chrominance components ~~(Cr1, Cr2)~~,
- Perceptual sub-bands decomposition ~~(E3, T2, T'2, T"2)~~ of said components ~~(A, Cr1, Cr2)~~ according to the visibility threshold of a human eye,
- Extraction ~~(E7)~~ of the salient elements of the sub-bands related to the luminance ~~(A)~~ component,
- Contour enhancement ~~(E8, T7)~~ of said salient elements in each sub-band related to the luminance ~~(A)~~ component,
- Calculation ~~(T7)~~ of a saliency map from the contour enhancement, for each sub-band related to the luminance ~~(A)~~ component.
- Creation ~~(T8)~~ of the saliency map as a function of the saliency maps obtained for each sub-band.

2. (currently amended) Method according to claim 1 ~~characterized in that~~ wherein it comprises, further to the perceptual sub-bands decomposition,

- a step of achromatic contrast sensitivity function ~~(CSF)~~ for the luminance ~~(A)~~ component and if said image is a color image,
- a step of chromatic sensitivity function for the chromatic components ~~(Cr1, Cr2)~~.

3. (currently amended) Method according to claim 2 ~~characterized in that~~ wherein it comprises a step ~~(E6, T4, T'4, T"4)~~ of visual masking, further to the step of contrast sensitivity function, for each sub-band of the luminance ~~(A)~~ component and of the chromatic ~~(Cr1, Cr2)~~ components.

4. (currently amended) Method according to claim 3 ~~characterized in that,~~ wherein, when said image is a color image, it comprises a step ~~(T5)~~ of chromatic reinforcement of the luminance ~~(A)~~ sub-bands.

5. (currently amended) Method according to ~~any of the preceding claims characterized in that~~ claim 1, wherein the perceptual sub-bands decomposition is obtained by carving-up the frequency domain both in spatial radial frequency and orientation.

6. (currently amended) Method according to claim 5 ~~characterized in that~~ wherein the perceptual decomposition of the luminance ~~(A)~~ component leads to 17 psycho visual sub-bands distributed on four crowns.

7. (currently amended) Method according to claim 5 ~~or 6 characterized in that~~ wherein the perceptual decomposition of the chromatic components ~~(Cr1, Cr2)~~ leads to 5 psycho visual sub-bands distributed on two crowns for each chromatic component ~~(Cr1, Cr2)~~.

8. (currently amended) Method according to claims ~~4 to 7 characterized in that~~ 4, wherein the chromatic reinforcement of the luminance ~~(A)~~ component is done on the sub-bands of the second crown and based on the sub-bands of the first crown of the chromatic components ~~(Cr1, Cr2)~~.

9. (currently amended) Device for creating a saliency map of an image ~~characterized in that~~ wherein it comprises means for:

- Projecting said image according to the luminance ~~(A)~~ component and if said image is a color image, according to the luminance ~~(A)~~ component and according to the chrominance components ~~(Cr1, Cr2)~~,
- Transposing into the frequential domains said luminance and chrominance signals,
- Decomposing into perceptual sub-bands said components of the frequential domain according to the visibility threshold of a human eye,
- Extracting the salient elements of the sub-bands related to the luminance component,
- Contour enhancing said salient elements in each sub-band related to the luminance component,
- Calculating a saliency map from the contour enhancement, for each sub-band related to the luminance component.
- Creating the saliency map as a function of the saliency maps obtained for each sub-band.